

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

F 1 R2

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

C Number: C96011

Lock Date: 01/28/2004

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

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	6	7	7	7	6	7	6	2	7	7	6	6	7	5	7	7	7	7	7	7	7	5	6	6	6
DAY ON TEST	3	1	3	2	2	3	9	9	1	2	4	2	2	7	2	3	0	3	3	2	3	9	0	7	1
	2	4	0	9	2	0	4	6	0	9	7	0	9	1	9	0	8	0	0	9	0	9	0	4	3
<hr/>																									
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

ALIMENTARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

1. Tissue severity grade
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DAY ON TEST	6	7	7	7	6	7	2	7	7	6	6	7	5	7	7	7	7	7	5	6	6	6		
	3	1	3	2	2	3	9	9	1	2	4	2	2	7	2	3	0	3	3	2	3	9	0	7
	2	4	0	9	2	0	4	6	0	9	7	0	9	1	9	0	8	0	0	9	0	9	0	4
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4

males
(cont...)Blood Vessel
Mineralization

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cardiomyopathy																								
Atrium, Thrombosis																								
Valve, Cardiomyopathy																								
Valve, Thrombosis																								

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia																								
Vacuolization Cytoplasmic																								
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia																								
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia																								
Parathyroid Gland	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia																								
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hemorrhage																								
Hyperplasia																								
Pars Intermedia, Hyperplasia																								

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DAY ON TEST	2	2	3	6	5	2	0	3	2	3	3	2	3	2	3	1	0	9	6	2	2	2	1	8	2
	9	9	0	7	8	9	2	0	9	0	0	9	0	0	9	0	2	7	5	2	8	9	9	9	9
<hr/>																									
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

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FISCHER 344 RATS MALE CONTROL	ANIMAL ID	DAY ON TEST																								* TOTALS	
		7	7	7	4	5	7	7	7	7	7	7	7	7	6	4	5	6	7	7	7	6	7	7	6	7	
		2	2	3	6	5	2	0	3	2	3	3	2	3	2	3	1	0	9	2	2	2	1	8	2		
Bile Duct, Hyperplasia		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7 2.4
Hepatocyte, Regeneration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mesentery		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6 2.5
Necrosis		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fat, Hemorrhage		2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	
Pancreas		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1 4.0
Acinus, Atrophy		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Salivary Glands		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Stomach, Forestomach		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hemorrhage																											1 2.0
Necrosis																											1 2.0
Ulcer																											3 3.3
Epithelium, Hyperplasia																											6 2.7
Stomach, Glandular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Erosion																											2 2.0
Mineralization																											1 4.0
Ulcer																											3 3.3
Tongue																											1 3.0
Epithelium, Hyperplasia																											1 3.0

CARDIOVASCULAR SYSTEM

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	7	7	7	4	5	7	7	7	7	7	7	7	7	7	7	6	4	5	6	7	7	7	6	7	
DAY ON TEST	2	2	3	6	5	2	0	3	2	3	3	2	3	2	3	1	0	9	6	2	2	2	1	8	2
	9	9	0	7	8	9	2	0	9	0	0	9	0	9	0	2	7	5	2	8	9	9	9	9	9
<hr/>																									
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

Epithelium, Hyperplasia 1 4.0

MUSCULOSKELETAL SYSTEM

NERVOUS SYSTEM

RESPIRATORY SYSTEM

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DAY ON TEST	2	2	3	6	5	2	0	3	2	3	3	2	3	2	3	1	0	9	2	2	2	1	8
	9	9	0	7	8	9	2	0	9	0	0	9	0	2	7	5	2	8	9	9	9	9	9
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
																							* TOTALS

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Congestion																							1 3.0
Hemorrhage																							3 2.0
Inflammation, Suppurative																							1 1.0
Inflammation, Chronic																							3 2.0
Alveolar Epithelium, Hyperplasia	1																						13 2.0
Alveolus, Infiltration Cellular, Histiocyte	3																						9 1.9
Artery, Mineralization																							2 2.5
Artery, Thrombosis																							1 3.0
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Foreign Body															X								5
Inflammation, Suppurative															1								1 1.4
Inflammation, Chronic															1								5 1.6
Glands, Olfactory Epithelium, Hyperplasia															1								1 1.0
Glands, Respiratory Epithelium, Dilatation															4								1 4.0
Goblet Cell, Hyperplasia																							3 1.7
Nasolacrimal Duct, Inflammation,																							2 2.0
Suppurative																							3 1.7
Olfactory Epithelium, Degeneration,																							3 1.7
Hyaline																							1 1.0
Olfactory Epithelium, Metaplasia															2								1 1.7
Respiratory Epithelium, Degeneration,															1								1 1.0
Hyaline																							1 2.0
Vomeronasal Organ, Inflammation,															2								1 2.0
Suppurative																							
Pleura															+								5
Inflammation, Chronic															2								4 1.3
Mesothelium, Hyperplasia																							1 4.0

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DAY ON TEST	2	2	3	6	5	2	0	3	2	3	3	2	3	2	3	1	0	9	2	2	2	1	8	2
	9	9	0	7	8	9	2	0	9	0	0	9	0	0	9	2	7	5	2	8	9	9	9	9
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
																								* TOTALS

Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
---------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	-----------

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Bilateral, Lens, Cataract																								1 2.0
Cornea, Inflammation, Suppurative																								2 1.5
Lens, Cataract	1	1																						5 2.4
Retina, Atrophy	2																							4 2.5
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Inflammation, Chronic																								1 1.0
Zymbal's Gland																								1

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Nephropathy	1	3	1	4	4	2	2	2	2	2	3	2	1	3	4	1	1	2	1	3	4	3	3	47 2.3
Papilla, Mineralization																								5 1.0
Pelvis, Transitional Epithelium, Hyperplasia																								3 1.7
Renal Tubule, Mineralization																								1 4.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Transitional Epithelium, Hyperplasia																								1 3.0

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	0	9	0	9	0	9	9	9	0	0	0	9	0	4	6	9	8	0	0	5	0	2	9	5	3
<hr/>																									
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

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Lab: BNW

	7	6	7	7	7	7	5	7	6	7	7	7	7	6	5	5	6	7	7	4	7	6	7	5	6
DAY ON TEST	3	6	3	2	3	2	1	2	7	3	3	2	3	7	9	8	1	3	3	4	3	3	2	6	8
	0	9	0	9	0	9	9	0	0	0	9	0	4	6	9	8	0	0	5	0	2	9	5	3	

FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

**males
(cont...)**

Blood Vessel

+

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cardiomyopathy																									
Atrium, Thrombosis	4		2		1																				

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia	3	1				3			2	3							3								
Vacuolization Cytoplasmic						3		1									3								

Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia	3			2			2			2							2								

Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia	3																								

Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia	3																								

Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst	3			2			4										3								
Hemorrhage																									

Hyperplasia	3																								

Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
C-cell, Hyperplasia	1				4			1		1							1		1		4	2			

* ... Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

INTEGUMENTARY SYSTEM

Mammary Gland

+

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMEN

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

DAY ON TEST	7	6	7	7	7	7	5	7	6	7	7	7	7	6	5	5	6	7	7	4	7	6	7	5	6
	3	6	3	2	3	2	1	2	7	3	3	2	3	7	9	8	1	3	3	4	3	3	2	6	8
	0	9	0	9	0	9	9	9	0	0	0	9	0	4	6	9	8	0	0	5	0	2	9	5	3
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males
(cont...)

MUSCULOSKELETAL SYSTEM

Skeletal Muscle +

NERVOUS SYSTEM

RESPIRATORY SYSTEM

* Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ Tissue examined microscopically

Lesion present

| Insufficient tissue

severely grade
M Missing tissue

M .. Missing tissue
A Autolysis precludes evaluation

BLANK Not examined microscopically

1-4 Lesion qualified as:

- .. Lesion qualified as:

1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqsted: 01/12/2006

Time Report Reqsted: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

DAY ON TEST	7	6	7	7	7	7	5	7	6	7	7	7	7	6	5	5	6	7	7	4	7	6	7	5	6
	3	6	3	2	3	2	1	2	7	3	3	2	3	7	9	8	1	3	3	4	3	3	2	6	8
	0	9	0	9	0	9	9	9	0	0	0	9	0	4	6	9	8	0	0	5	0	2	9	5	3
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
Hemorrhage																									
Inflammation, Suppurative																									
Inflammation, Granulomatous																									
Inflammation, Chronic																									
Thrombosis																									
Alveolar Epithelium, Hyperplasia																									
Alveolus, Foreign Body																									
Alveolus, Infiltration Cellular, Histiocyte																									
Bronchiole, Hyperplasia																									
Bronchiole, Inflammation, Chronic																									
Interstitial, Fibrosis																									
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Foreign Body														X	X										
Inflammation, Suppurative														2											
Inflammation, Chronic																									
Epithelium, Nasolacrimal Duct, Metaplasia, Squamous														2											
Glands, Respiratory Epithelium, Dilatation														3											
Goblet Cell, Hyperplasia														2	2										
Nasolacrimal Duct, Inflammation, Suppurative														2											
Olfactory Epithelium, Degeneration, Hyaline														2											
Olfactory Epithelium, Hyperplasia, Basal Cell														1	1	1	1	1	1	1	2	1	1	1	1
Olfactory Epithelium, Metaplasia														1	1						1	2			
Olfactory Epithelium, Necrosis																									
Respiratory Epithelium, Degeneration, Hyaline																									
Respiratory Epithelium, Hyperplasia														2							3	2	1		

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

Pleura
Inflammation, Chronic

Trachea Glands, Cyst

SPECIAL SENSES SYSTEM

Harderian Gland
Inflammation, Suppurative
Inflammation, Chronic

URINARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqsted: 01/12/2006

Time Report Reqsted: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

	7	6	7	7	7	7	5	7	6	7	7	7	7	6	5	5	6	7	7	4	7	6	7	5	6
	3	6	3	2	3	2	1	2	7	3	3	2	3	7	9	8	1	3	3	4	3	3	2	6	8
	0	9	0	9	0	9	9	0	0	0	0	0	0	4	6	9	8	0	0	5	0	2	9	5	3
DAY ON TEST	7	6	7	7	7	7	5	7	6	7	7	7	7	6	5	5	6	7	7	4	7	6	7	5	6
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
Pelvis, Transitional Epithelium, Hyperplasia																									
	2																								
Renal Tubule, Cyst																									
Renal Tubule, Hyperplasia																									
Ureter																									
Urinary Bladder Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

ALIMENTARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

CARDIOVASCULAR SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as

1) Minimal 3) Moderate

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

Follicular Cell, Cyst

1 2.0

GENERAL BODY SYSTEM

Peritoneum + + 2

GENITAL SYSTEM

HEMATOPOIETIC SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 30

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

FISCHER 344 RATS MALE 250 PPM	ANIMAL ID	DAY ON TEST	7	7	7	5	7	7	5	6	6	5	6	7	6	6	5	4	7	7	6	5	7	6	6	7	7
		3	2	2	7	3	2	2	1	4	3	1	3	6	8	4	8	0	2	2	2	6	1	7	3	2	2
		0	9	9	5	0	9	8	8	3	6	3	0	5	6	1	0	5	9	4	5	1	4	9	9	9	9
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
		2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	5	
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
		* TOTALS																									
Bone Marrow		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Lymph Node Deep Cervical, Ectasia		+																									10
Lymph Node, Bronchial Ectasia		M	M	M	M	M	+	+	M	M	M	+	M	M	M	M	M	M	M	M	M	M	M	M	M	12	
Hyperplasia, Lymphoid																											1 4.0
Lymph Node, Mandibular Ectasia		M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	2 1.2.0	
Lymph Node, Mediastinal Hemorrhage		M	+	+	M	+	+	M	+	+	+	+	+	+	+	+	+	+	+	M	+	+	M	+	+	32	
Lymph Node, Mesenteric Hemorrhage																											1 2.0
Spleen Fibrosis		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hemorrhage																											2 3.5
Necrosis																											3 3.7
Thymus		+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
---------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

* ... Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

DAY ON TEST	7	7	7	5	7	7	5	6	6	5	6	7	6	6	5	4	7	7	6	5	7	6	6	7	7
	3	2	2	7	3	2	2	1	4	3	1	3	6	8	4	8	0	2	2	6	1	7	3	2	2
	0	9	9	5	0	9	8	8	3	6	3	0	5	6	1	0	5	9	4	5	1	4	9	9	9
<hr/>																									
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

MUSCULOSKELETAL SYSTEM

Skeletal Muscle +

NERVOUS SYSTEM

RESPIRATORY SYSTEM

Total animals with tissue examined microscopically: Total animals with lesion and mean severity grade

† - Tissue examined microscopically

+ .. Tissue examined
x Lesion present

.. Essien present
 .. Insufficient tissue

M.. Missing tissue

M .. Missing tissue
A Autolysis precludes evaluation

BLANK - Not examined microscopically

Page 32

1-4 .. Lesion qualified as:

-.. Lesion qualified as:

1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

FISCHER 344 RATS MALE 250 PPM	ANIMAL ID	DAY ON TEST																								* TOTALS	
		7	7	7	5	7	7	5	6	6	5	6	7	6	6	5	4	7	7	6	5	7	6	6	7	7	
		3	2	2	7	3	2	2	1	4	3	1	3	6	8	4	8	0	2	2	6	1	7	3	2	2	
		0	9	9	5	0	9	8	8	3	6	3	0	5	6	1	0	5	9	4	5	1	4	9	9	9	
Hemorrhage																											7 2.6
Inflammation, Suppurative																											1 4.0
Inflammation, Granulomatous																											1 1.0
Inflammation, Chronic																											3 1.7
Thrombosis																											1 2.0
Alveolar Epithelium, Hyperplasia																											11 1.5
Alveolus, Foreign Body																											1 2.0
Alveolus, Infiltration Cellular, Histiocyte	1																										7 1.4
Bronchiole, Hyperplasia																											1 2.0
Bronchiole, Inflammation, Chronic																											1 2.0
Interstitial, Fibrosis																											2 2.0
Nose		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Foreign Body																X											5
Inflammation, Suppurative															1	3										8 2.4	
Inflammation, Chronic																											1 1.0
Epithelium, Nasolacrimal Duct, Metaplasia, Squamous																											2 2.0
Glands, Respiratory Epithelium, Dilatation	3																										3 3.0
Goblet Cell, Hyperplasia																											11 2.3
Nasolacrimal Duct, Inflammation, Suppurative																											2 2.0
Olfactory Epithelium, Degeneration, Hyaline																	2										2 2.0
Olfactory Epithelium, Hyperplasia, Basal Cell	1	1	1	1	1																						19 1.1
Olfactory Epithelium, Metaplasia																											4 1.3
Olfactory Epithelium, Necrosis																											1 1.0
Respiratory Epithelium, Degeneration, Hyaline																											1 1.0
Respiratory Epithelium, Hyperplasia	3	2																									15 2.0

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

DAY ON TEST	7	7	7	5	7	7	5	6	6	5	6	7	6	6	5	4	7	7	6	5	7	6	6	7	7
	3	2	2	7	3	2	2	1	4	3	1	3	6	8	4	8	0	2	2	6	1	7	3	2	2
	0	9	9	5	0	9	8	8	3	6	3	0	5	6	1	0	5	9	4	5	1	4	9	9	9
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

*** TOTALS**

Pleura	3
Inflammation, Chronic	1.3
Trachea	
Glands, Cyst	50
	1 3.0

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Degeneration																								1 4.0
Inflammation, Chronic Active																								1 4.0
Bilateral, Lens, Cataract																								1 4.0
Bilateral, Retina, Atrophy																								1 2.0
Lens, Cataract																								1 2.0
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Inflammation, Suppurative																								1 3.0
Inflammation, Chronic																								3 1 3.0

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Infarct																								1 4.0	
Infarct, Multiple																								1 4.0	
Nephropathy	4	4	2	2	3	4	2		3	2		2	2	2		2	2	2	1	2	4	2	2	4	3
Bilateral, Infarct																								1 3.0	
Glomerulus, Inflammation, Suppurative																								1 4.0	
Papilla, Mineralization	1	1	2	1	1	2		4	1	1	3	2	1	1	1	1	1	3	2	1	2	3		35 1.7	

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	3	2	2	7	3	2	2	1	4	3	1	3	6	8	4	8	0	2	2	6	1	7	3	2	2
	0	9	9	5	0	9	8	8	3	6	3	0	5	6	1	0	5	9	4	5	1	4	9	9	9
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
	* TOTALS																								
Pelvis, Transitional Epithelium, Hyperplasia	1																								
Renal Tubule, Cyst	1																								
Renal Tubule, Hyperplasia	3 3.3																								
Ureter	1																								
Urinary Bladder Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
	2																								1 2.0

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Page 35

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TDMS No. 96011 - 05

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Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

DAY ON TEST	4	6	6	7	7	6	7	7	7	7	6	7	7	7	7	7	7	6	6	7	7	7	7	5
	9	2	3	2	2	7	2	3	3	2	4	2	3	3	2	3	2	4	7	2	3	2	2	6
	5	5	4	9	9	0	9	0	0	9	6	9	0	0	9	0	9	5	4	9	0	9	9	9

FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
500 PPM	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4

males
(cont...)

ALIMENTARY SYSTEM

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	9	2	3	2	2	7	2	3	3	2	4	2	3	3	3	2	3	4	7	2	3	2	6
	5	5	4	9	9	0	9	0	0	9	6	9	0	0	0	9	0	5	4	9	0	9	9
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500 PPM	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3

**males
(cont...)**

Mesentery	+	+																					
Necrosis			3																			3	2
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Acinus, Atrophy																							
Acinus, Hyperplasia			2																				
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Suppurative																							
Ulcer																							
Epithelium, Hyperplasia			3																				
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Erosion																							
Hyperplasia, Lymphoid			3																				
Ulcer																							
Tongue	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Epithelium, Hyperplasia																							

CARDIOVASCULAR SYSTEM

Blood Vessel																					
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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	4	6	6	7	7	6	7	7	7	7	6	7	7	7	7	7	7	6	6	7	7	7	7	5
	9	2	3	2	2	7	2	3	3	2	4	2	3	3	3	2	3	4	7	2	3	2	2	6
	5	5	4	9	9	0	9	0	0	9	6	9	0	0	0	9	0	5	4	9	0	9	9	9
FISCHER 344 RATS MALE																								
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500 PPM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4

males
(cont...)

Cardiomyopathy	2	2	1	1																				2	4
Atrium, Thrombosis																									
Valve, Hemorrhage																									

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3
Hyperplasia																								
Hypertrophy																								
Vacuolization Cytoplasmic																								
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2
Hyperplasia																								
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A
Cyst																								3
Hemorrhage																								
Hyperplasia																								
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
C-cell, Hyperplasia																								
Follicular Cell, Hyperplasia																								
	2																							

GENERAL BODY SYSTEM

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	4	6	6	7	7	6	7	7	7	7	6	7	7	7	7	7	7	6	6	7	7	7	7	5
	9	2	3	2	2	7	2	3	3	2	4	2	3	3	3	2	3	4	7	2	3	2	2	6
	5	5	4	9	9	0	9	0	0	9	6	9	0	0	0	9	0	5	4	9	0	9	9	9
FISCHER 344 RATS MALE																								
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500 PPM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4

**males
(cont...)**

Epiglottis, Metaplasia, Squamous

1

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Hemorrhage	2	2																								
Inflammation																										
Inflammation, Chronic		1		2															1		2					
Alveolar Epithelium, Hyperplasia																			2		3					
Alveolus, Infiltration Cellular, Histiocyte																			1		1					
Bronchiole, Inflammation, Chronic																			1		1					
Interstitial, Fibrosis																			2		2					
Nose																										
Foreign Body	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A		
Inflammation, Suppurative																			X							
Epithelium, Nasolacrimal Duct, Metaplasia, Squamous			1																1							
Glands, Olfactory Epithelium, Hyperplasia																			2		2					
Glands, Respiratory Epithelium, Dilatation																			1		3					
Glands, Respiratory Epithelium, Hyperplasia																			3							
Goblet Cell, Olfactory Epithelium, Hyperplasia																			3							
Goblet Cell, Hyperplasia																			2		2					
Nasolacrimal Duct, Inflammation, Suppurative																			3							
Olfactory Epithelium, Degeneration																				2						
Olfactory Epithelium, Degeneration, Hyaline																				1						
Olfactory Epithelium, Hyperplasia, Basal Cell	1	1	1		1	1	1	1	1	1		1		1	1	1	1	1	1	1	1	1	1	1	1	
Olfactory Epithelium, Metaplasia												1							3							

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	4	6	6	7	7	6	7	7	7	7	6	7	7	7	7	7	7	6	6	7	7	7	7	5
	9	2	3	2	2	7	2	3	3	2	4	2	3	3	3	2	3	4	7	2	3	2	2	6
	5	5	4	9	9	0	9	0	0	9	6	9	0	0	0	9	0	5	4	9	0	9	9	9
FISCHER 344 RATS MALE																								
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500 PPM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4

males
(cont...)

Capsule, Dilatation 1 3 2 1 2 1 3 3 2 1 1 3 3 1 1 3 4 3 2 2 2 3 3 3 2 1 3

Papilla, Mineralization 3 1 1 3 2 1

Pelvis, Transitional Epithelium, Hyperplasia 3 1

Pelvis, Dilatation

Renal Tubule, Accumulation, Hyaline Droplet 4

Renal Tubule, Cyst X

Renal Tubule, Hyperplasia 2

2 3 4

2 3 4 X

Urethra
Transitional Epithelium, Hyperplasia

Urinary Bladder + A

Calculus Gross Observation

Inflammation, Chronic

Transitional Epithelium, Hyperplasia 1

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CUMENF

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ALIMENTARY SYSTEM

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DAY ON TEST	7	6	6	5	7	6	6	7	6	7	6	4	6	5	7	2	6	7	5	7	7	7	6	7	7	
	2	9	8	5	2	3	0	3	3	0	7	6	4	2	2	1	2	2	5	2	2	3	7	3	3	
	9	5	8	4	9	8	0	0	9	2	0	0	8	3	9	3	6	9	4	9	9	0	9	0	0	
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
500 PPM	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
																									* TOTALS	
Cardiomyopathy																									1	12 2.0
Atrium, Thrombosis	4																								4	2.8
Valve, Hemorrhage																									1	2.0

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia																									10 2.4
Hypertrophy																									1 3.0
Vacuolization Cytoplasmic																									7 2.3
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia																									18 2.8
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Cyst																									2 3.5
Hemorrhage																									1 4.0
Hyperplasia																									13 3.2
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
C-cell, Hyperplasia																									6 1.8
Follicular Cell, Hyperplasia																									1 2.0

GENERAL BODY SYSTEM

* ... Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

INTEGUMENTARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

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Page 49

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

FISCHER 344 RATS MALE 500 PPM	ANIMAL ID	7	6	6	5	7	6	6	7	6	4	6	5	7	2	6	7	5	7	7	7	6	7	7	
		2	9	8	5	2	3	0	3	3	0	7	6	4	2	2	1	2	2	2	3	7	3	3	3
		9	5	8	4	9	8	0	0	9	2	0	0	8	3	9	3	6	9	4	9	9	0	9	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
		2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	5	
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	
		* TOTALS																							
Epiglottis, Metaplasia, Squamous																									
Lung		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hemorrhage																									3 2.3
Inflammation																									1 2.0
Inflammation, Chronic																									6 1.3
Alveolar Epithelium, Hyperplasia																									10 2.1
Alveolus, Infiltration Cellular, Histiocyte																									4 1.8
Bronchiole, Inflammation, Chronic																									1 2.0
Interstitial, Fibrosis																									1 2.0
Nose		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Foreign Body					X							X													3
Inflammation, Suppurative						1						2		2											8 1.9
Epithelium, Nasolacrimal Duct, Metaplasia,																									1 2.0
Squamous																									2
Glands, Olfactory Epithelium, Hyperplasia																									1 2.0
Glands, Respiratory Epithelium, Dilatation																									2 3.0
Glands, Respiratory Epithelium,																									2 2.0
Hyperplasia																									1 2.0
Goblet Cell, Olfactory Epithelium,																									1 2.0
Hyperplasia																									7 2.3
Goblet Cell, Hyperplasia						2						2	3	3											3 2.3
Nasolacrimal Duct, Inflammation,							2																		2
Suppurative																									
Olfactory Epithelium, Degeneration																									1 1.0
Olfactory Epithelium, Degeneration,																									1 2.0
Hyaline																									
Olfactory Epithelium, Hyperplasia, Basal		1	1									1	1						1	1	1	1	1		27 1.0
Cell																									
Olfactory Epithelium, Metaplasia			3									3											2		5 2.4

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TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

DAY ON TEST	7	6	6	5	7	6	6	7	6	4	6	5	7	2	6	7	5	7	7	7	6	7	7
	2	9	8	5	2	3	0	3	3	0	7	6	4	2	2	1	2	2	2	3	7	3	3
	9	5	8	4	9	8	0	0	9	2	0	0	8	3	9	3	6	9	9	9	0	9	0
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500 PPM	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
Olfactory Epithelium, Ulcer																							
Respiratory Epithelium, Hyperplasia	3									4	1	4	3										
Respiratory Epithelium, Inflammation, Chronic																							
Squamous Epithelium, Hyperplasia																							
Squamous Epithelium, Inflammation																							
Pleura																							
Inflammation, Chronic																							
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Bilateral, Retina, Atrophy																							
Ciliary Body, Iris, Inflammation, Suppurative																							
Lens, Cataract																							
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Infarct																							
Nephropathy	2																						
Bilateral, Renal Tubule, Cyst	4	3	4	1	3	2	3	4	4	3	2	4	3	4	2	3	2	4	2	4	1	3	2

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TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

DAY ON TEST	7	6	6	5	7	6	6	7	6	7	6	4	6	5	7	2	6	7	5	7	7	7	6	7	7	
	2	9	8	5	2	3	0	3	3	0	7	6	4	2	2	1	2	2	5	2	2	3	7	3	3	3
	9	5	8	4	9	8	0	0	9	2	0	0	8	3	9	3	6	9	4	9	9	0	9	0	9	
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
500 PPM	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
																									* TOTALS	
Capsule, Dilatation																									1 3.0	
Papilla, Mineralization	1	3	1	2	1	2	1	3	3	2	1	3	2	1	3	2	3	2	3	3	3	1	1	1	44 2.1	
Pelvis, Transitional Epithelium, Hyperplasia																									14 2.4	
Pelvis, Dilatation																									1 4.0	
Renal Tubule, Accumulation, Hyaline Droplet																									1 4.0	
Renal Tubule, Cyst																									3	
Renal Tubule, Hyperplasia																									8 2.6	
Urethra																									1	
Transitional Epithelium, Hyperplasia																									1 3.0	
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Calculus Gross Observation																									1	
Inflammation, Chronic																									1 2.0	
Transitional Epithelium, Hyperplasia																									4 2.0	

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+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

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2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

ALIMENTARY SYSTEM

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Page 54

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TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

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Lab: BNW

DAY ON TEST	7	7	7	5	7	6	7	7	7	6	5	7	7	7	6	6	6	5	7	7	7	7	6	6	
	2	2	3	4	2	7	3	2	3	2	3	5	0	3	1	6	3	8	2	3	2	2	3	5	2
	9	9	0	1	9	7	0	9	0	6	5	4	5	0	1	0	5	4	9	0	9	9	0	0	8
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 PPM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
Mesentery																									
Hemorrhage																									
Necrosis																									
Fat, Hemorrhage																									
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia																									
Acinus, Atrophy																									
Acinus, Hyperplasia																									
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Ulcer																									
Epithelium, Hyperplasia																									
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Erosion																									
Ulcer																									
Tongue																									
Epithelium, Hyperplasia																									

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cardiomyopathy																									
Atrium, Thrombosis																									
Ventricle, Hypertrophy																									

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TDMS No. 96011 - 05

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Species/Strain: RATS/F 344

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DAY ON TEST	7	7	7	5	7	6	7	7	7	6	5	7	7	7	6	6	5	7	7	7	7	7	6	6	
	2	2	3	4	2	7	3	2	3	2	3	5	0	3	1	6	3	8	2	3	2	2	3	5	2
	9	9	0	1	9	7	0	9	0	6	5	4	5	0	1	0	5	4	9	0	9	9	0	0	8
FISCHER 344 RATS MALE																									
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
1000 PPM	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	

ENDOCRINE SYSTEM

GENERAL BODY SYSTEM

Peritoneum +

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	7	7	7	5	7	6	7	7	7	6	5	7	7	7	6	6	6	5	7	7	7	7	7	6	6
	2	2	3	4	2	7	3	2	3	2	3	5	0	3	1	6	3	8	2	3	2	2	3	5	2
	9	9	0	1	9	7	0	9	0	6	5	4	5	0	1	0	5	4	9	0	9	9	0	0	8
<hr/>																									
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 PPM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males
(cont...)

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<hr/>																										
Preputial Gland Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<hr/>																										
Prostate Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Suppurative	2	1	1	2	2	2	1	2		3	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<hr/>																										
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Bilateral, Interstitial Cell, Hyperplasia															2											
Germinal Epithelium, Atrophy															3	3	4									
Interstitial Cell, Hyperplasia															4			3	3							3

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<hr/>																										
Lymph Node	+														+	+										
Deep Cervical, Ectasia	4																									
Deep Cervical, Hemorrhage																										
Deep Cervical, Hyperplasia, Lymphoid		3																	4							
Pancreatic, Ectasia																										

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Species/Strain: RATS/F 344

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DAY ON TEST	7	7	7	5	7	6	7	7	7	6	5	7	7	7	6	6	6	5	7	7	7	7	6	6		
	2	2	3	4	2	7	3	2	3	2	3	5	0	3	1	6	3	8	2	3	2	2	3	5	2	
	9	9	0	1	9	7	0	9	0	6	5	4	5	0	1	0	5	4	9	0	9	9	0	0	8	
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1000 PPM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	
Alveolar Epithelium, Metaplasia, Mucous																										
Alveolus, Emphysema																										
Alveolus, Infiltration Cellular, Histiocyte	2	3	2																	1	2				1	1
Alveolus, Proteinosis																										
Interstitialium, Fibrosis																										
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Foreign Body							X																			
Hyperplasia, Basal Cell																										
Inflammation, Suppurative																										
Glands, Olfactory Epithelium, Hyperplasia																										
Glands, Respiratory Epithelium, Dilatation																										
Glands, Respiratory Epithelium, Hyperplasia																										
Hyperplasia																										
Goblet Cell, Hyperplasia	2																									
Olfactory Epithelium, Hyperplasia, Basal Cell	1	1	1	1	1														1	1	1	1	1	1	1	
Olfactory Epithelium, Inflammation, Chronic																										
Olfactory Epithelium, Metaplasia																										
Olfactory Epithelium, Necrosis																										
Respiratory Epithelium, Hyperplasia	4	3		2	4	1													2	2	3	1	3	2	2	
Respiratory Epithelium, Inflammation, Chronic	2						1																			
Respiratory Epithelium, Necrosis																		1								
Pleura																										
Inflammation, Chronic																										
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Epithelium, Hyperplasia																										

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+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

	7	7	7	5	7	6	7	7	7	6	5	7	7	7	6	6	6	5	7	7	7	7	7	6	6
	2	2	3	4	2	7	3	2	3	2	3	5	0	3	1	6	3	8	2	3	2	2	3	5	2
	9	9	0	1	9	7	0	9	0	6	5	4	5	0	1	0	5	4	9	0	9	9	0	0	8

FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 PPM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

**males
(cont...)****SPECIAL SENSES SYSTEM**

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Bilateral, Lens, Cataract																									
Cornea, Inflammation, Chronic																									
Lens, Cataract	2	2																							
Retina, Atrophy																									
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Zymbal's Gland																									

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Atrophy																									
Infarct																									
Nephropathy																									
Papilla, Mineralization	4	4	3	2	2	2	4	3	4	2	2	2	1	2	4	2	3	2	1	2	3	3	2	4	4
Pelvis, Transitional Epithelium, Hyperplasia	2	3	1	2	1				2	1	3	2			3	3	4	2	1	3	2	4	1	1	2
Pelvis, Dilatation	2	1													3	2	2						3		2
Renal Tubule, Accumulation, Hyaline Droplet																									
Renal Tubule, Cyst															X										
Renal Tubule, Hyperplasia															2		2								
Renal Tubule, Hypertrophy	3																	2							

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First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

Ureter

†

Urethra

+

Urinary Bladder

Transitional Epithelium, Hyperplasia

**males
(cont...)**

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+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 62

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1) Minimal 3) Moderate

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TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

ALIMENTARY SYSTEM

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+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
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2) Mild 4) Marked

TDMS No. 96011 - 05

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Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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DAY ON TEST	7	7	6	6	6	7	6	7	7	7	6	4	7	6	6	5	7	7	7	6	7	6	7	7	
	3	1	7	1	4	2	7	2	1	2	2	8	5	2	0	7	1	2	3	3	2	2	6	2	3
	0	7	4	8	2	9	7	0	8	9	9	8	3	9	0	7	5	9	0	0	4	9	7	9	0
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 PPM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

*** TOTALS**

Mesentery																										
Hemorrhage																										
Necrosis																										
Fat, Hemorrhage																										
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hyperplasia																										
Acinus, Atrophy																										
Acinus, Hyperplasia																										
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Ulcer																										
Epithelium, Hyperplasia																										
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Erosion																										
Ulcer																										
Tongue																										
Epithelium, Hyperplasia																										

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cardiomyopathy																										
Atrium, Thrombosis																										
Ventricle, Hypertrophy																										

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	7	7	6	6	6	7	6	7	7	7	6	4	7	6	6	5	7	7	7	6	7	6	7	7
	3	1	7	1	4	2	7	2	1	2	2	8	5	2	0	7	1	2	3	3	2	2	6	2
	0	7	4	8	2	9	7	0	8	9	8	3	9	0	7	5	9	0	0	4	9	7	9	0
																							
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 PPM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
																								* TOTALS

ENDOCRINE SYSTEM

Adrenal Cortex

Hyperplasia

Vacuolization Cytoplasmic

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
																								10 2.7
																								4 2.5

Adrenal Medulla

Hyperplasia

Bilateral, Hyperplasia

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
																								12 2.5
																								1 2.0

Islets, Pancreatic

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

Parathyroid Gland

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

Pituitary Gland

Hemorrhage

Hyperplasia

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
																								3 4.0
																								6 3.0

Thyroid Gland

C-cell, Hyperplasia

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
																								8 2.0

GENERAL BODY SYSTEM

Peritoneum

+ 2

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+ .. Tissue examined microscopically

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TDMS No. 96011 - 05

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Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

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Pathologist: PIERCE, J. - RENNE, R.

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First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

DAY ON TEST	7	7	6	6	6	7	6	7	7	7	6	4	7	6	6	5	7	7	7	6	7	6	7	7	
	3	1	7	1	4	2	7	2	1	2	2	8	5	2	0	7	1	2	3	3	2	2	6	2	3
	0	7	4	8	2	9	7	0	8	9	9	8	3	9	0	7	5	9	0	0	4	9	7	9	0
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 PPM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
	* TOTALS																								

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Preputial Gland Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
																								1 4.0
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia																								2 1.5
Inflammation, Suppurative																								28 1.7
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Bilateral, Interstitial Cell, Hyperplasia																								1 2.0
Germinal Epithelium, Atrophy	3																							6 3.2
Interstitial Cell, Hyperplasia																								9 3.0

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymph Node	+		+		+	+	+	+																14
Deep Cervical, Ectasia																								1 4.0
Deep Cervical, Hemorrhage																								1 3.0
Deep Cervical, Hyperplasia, Lymphoid																								2 3.5
Pancreatic, Ectasia																								1 3.0

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	7	7	6	6	6	7	6	7	7	7	6	4	7	6	6	5	7	7	7	6	7	6	7	7
DAY ON TEST	3	1	7	1	4	2	7	2	1	2	2	8	5	2	0	7	1	2	3	3	2	2	6	2
	0	7	4	8	2	9	7	0	8	9	8	3	9	0	7	5	9	0	0	4	9	7	9	0
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 PPM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
																								* TOTALS

Lymph Node, Bronchial	+	M	M	M	M	M	+	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	8	
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	1	
Lymph Node, Mediastinal Angiectasis	+	M	M	M	M	+	+	M	+	M	M	+	+	+	+	+	M	+	+	+	+	M	+	M	34
																								1 4.0	
Lymph Node, Mesenteric Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
																								1 2.0	
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Accessory Spleen																	X							1	
Fibrosis																								2 3.5	
Hematopoietic Cell Proliferation																								1 3.0	
Hemorrhage	4																							4 4.0	
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Galactocele																								1 2.0
Epithelium, Hyperplasia																								1 2.0
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cyst Epithelial Inclusion																								2 4.0
Inflammation, Chronic																								1 4.0

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+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMEN

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

Ulcer **1 4.0**

MUSCULOSKELETAL SYSTEM

NERVOUS SYSTEM

RESPIRATORY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

Lean severely grade
M .. Missing tissue
A .. Autolysis precludes evaluation
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Page 68

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	3	1	7	1	4	2	7	2	1	2	2	8	5	2	0	7	1	2	3	3	2	2	6	2
	0	7	4	8	2	9	7	0	8	9	8	3	9	0	7	5	9	0	0	4	9	7	9	0

FISCHER 344 RATS MALE

ANIMAL ID

1000 PPM*** TOTALS**

Alveolar Epithelium, Metaplasia, Mucous	1	3.0
Alveolus, Emphysema	1	2.0
Alveolus, Infiltration Cellular, Histiocyte	14	1.8
Alveolus, Proteinosis	1	3.0
Interstitial, Fibrosis	1	3.0

Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Foreign Body						X																			4
Hyperplasia, Basal Cell																									1
Inflammation, Suppurative							3																		6
Glands, Olfactory Epithelium, Hyperplasia																									1
Glands, Respiratory Epithelium, Dilatation																									2
Glands, Respiratory Epithelium,																									4
Hyperplasia																									2.0
Goblet Cell, Hyperplasia																									5
Olfactory Epithelium, Hyperplasia, Basal																									2.0
Cell	1	1	1					1	1	1	1	1									1	1	1	1	1
Olfactory Epithelium, Inflammation,																									1
Chronic																									2.0
Olfactory Epithelium, Metaplasia																									5
Olfactory Epithelium, Necrosis																									1
Respiratory Epithelium, Hyperplasia																									1
Respiratory Epithelium, Inflammation,																									2.7
Chronic																									2
Respiratory Epithelium, Necrosis																									1.5

Pleura	+																								6
Inflammation, Chronic	1																								1.5
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Epithelium, Hyperplasia																									1
																									2.0

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

DAY ON TEST	7	7	6	6	6	7	6	7	7	7	6	4	7	6	6	5	7	7	7	6	7	6	7	7	
	3	1	7	1	4	2	7	2	1	2	2	8	5	2	0	7	1	2	3	3	2	2	6	2	3
	0	7	4	8	2	9	7	0	8	9	9	8	3	9	0	7	5	9	0	0	4	9	7	9	0
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 PPM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
																									* TOTALS

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Bilateral, Lens, Cataract																									1 1.0
Cornea, Inflammation, Chronic																									1 1.0
Lens, Cataract																									4 2.5
Retina, Atrophy																									2 3.0
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Zymbal's Gland																									2

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Atrophy																									1 4.0
Infarct																									1 2.0
Nephropathy	3	4	3	2	4	4	3	4	2	4	2	2	1	2	2	2	2	2	2	2	2	4	1	2	2.7
Papilla, Mineralization	2		1	4	2	3	2	3	1	1	1	1	2	2	3	1	1	3	3	3	2	4	1	2	2.1
Pelvis, Transitional Epithelium, Hyperplasia	2	1		1	2	3	2																		15 2.0
Pelvis, Dilatation																									1 4.0
Renal Tubule, Accumulation, Hyaline																									1 4.0
Droplet																									4
Renal Tubule, Cyst																									2
Renal Tubule, Hyperplasia																									6 2.2
Renal Tubule, Hypertrophy																									1 3.0

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l .. Insufficient tissue

M .. Missing tissue

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TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

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First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

DAY ON TEST	7	7	6	6	6	7	6	7	7	7	6	4	7	6	6	5	7	7	7	6	7	6	7	7	
	3	1	7	1	4	2	7	2	1	2	2	8	5	2	0	7	1	2	3	3	2	2	6	2	3
	0	7	4	8	2	9	7	0	8	9	9	8	3	9	0	7	5	9	0	0	4	9	7	9	0
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000 PPM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
	* TOTALS																								
Ureter																									1
Urethra																									1
Urinary Bladder Transitional Epithelium, Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
																									2 1.5

*** END OF MALE DATA ***

* ... Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

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l .. Insufficient tissue

M .. Missing tissue

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Page 71

1-4 .. Lesion qualified as:

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TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

	6	6	7	7	7	5	5	6	6	4	7	7	7	7	7	6	7	7	6	6	5	6	3	7	7
DAY ON TEST	6	7	1	1	3	4	5	6	6	8	3	3	3	3	3	1	3	0	8	3	9	7	7	1	3
	2	4	0	6	2	7	8	0	2	5	1	1	1	2	2	8	2	5	8	5	6	6	4	6	2
FISCHER 344 RATS FEMALE																									
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

ALIMENTARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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x .. Lesion present

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M., Missing tissue

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TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

	6	6	7	7	7	5	5	6	6	4	7	7	7	7	7	6	7	7	6	6	5	6	3	7	7
	6	7	1	1	3	4	5	6	6	8	3	3	3	3	3	1	3	0	8	3	9	7	7	1	3
	2	4	0	6	2	7	8	0	2	5	1	1	1	2	2	8	2	5	8	5	6	6	4	6	2
.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CONTROL	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females
(cont...)

Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Ulcer																									
Epithelium, Hyperplasia																									
Stomach, Glandular Erosion	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Tongue	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Epithelium, Hyperplasia																									

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cardiomyopathy																									

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hemorrhage																										
Hyperplasia																										
Necrosis																										
Vacuolization Cytoplasmic																										
	4	2	2							1	1									2		2	2	3		

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TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

INTEGUMENTARY SYSTEM

MUSCULOSKELETAL SYSTEM

NERVOUS SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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| .. Insufficient tissue

M .. Missing tissue
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BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

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Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

	6	6	7	7	7	5	5	6	6	4	7	7	7	7	7	6	7	7	6	6	5	6	3	7	7
	6	7	1	1	3	4	5	6	6	8	3	3	3	3	3	1	3	0	8	3	9	7	7	1	3
	2	4	0	6	2	7	8	0	2	5	1	1	1	2	2	8	2	5	8	5	6	6	4	6	2
.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CONTROL	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females
(cont...)

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Foreign Body																									
Inflammation, Suppurative																									
Inflammation, Chronic																									
.....																									
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hemorrhage																									
Inflammation, Suppurative																									
Inflammation, Chronic																									
Alveolar Epithelium, Hyperplasia																									
Alveolus, Infiltration Cellular, Histiocyte																									
Bronchiole, Inflammation, Chronic																									
Interstitial, Fibrosis																									
.....																									
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Suppurative																									
Inflammation, Chronic																									
Glands, Respiratory Epithelium, Dilatation																									
Goblet Cell, Hyperplasia																									
Nasolacrimal Duct, Inflammation,																									
Suppurative																									
Nasolacrimal Duct, Inflammation, Chronic																									
Olfactory Epithelium, Degeneration,																									
Hyaline																									
Respiratory Epithelium, Degeneration,																									
Hyaline																									
.....																									

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

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	6	6	7	7	7	5	5	6	6	4	7	7	7	7	7	6	7	7	6	6	5	6	3	7	7
	6	7	1	1	3	4	5	6	6	8	3	3	3	3	3	1	3	0	8	3	9	7	7	1	3
	2	4	0	6	2	7	8	0	2	5	1	1	1	2	2	8	2	5	8	5	6	6	4	6	2
.....																									
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females
(cont...)

Pleura	+	+	+	+	+	1	1	+	+	+	1	1	+	1	2	+	+	+	1
Inflammation, Chronic																			

Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
---------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Bilateral, Lens, Cataract																									4
Bilateral, Retina, Atrophy																									3
Cornea, Inflammation, Suppurative																									4
Lens, Cataract																									3
Retina, Atrophy																									2

Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic																								

Lacrimal Gland																								
----------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Zymbal's Gland	+																							
----------------	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Nephropathy	1	1	1	1	1	1	1	2	2	1	2	3	2	1	1	1	1	1	1	1	1	1	1	1	1
Papilla, Mineralization																									
Pelvis, Transitional Epithelium, Hyperplasia	1																								
Pelvis, Transitional Epithelium,																									

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

ALIMENTARY SYSTEM

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Lab: BNW

	7	5	7	7	7	7	4	7	6	7	7	7	5	7	6	7	6	7	7	7	7	7	7	7	6
	3	1	3	3	3	3	9	1	1	3	0	3	0	3	6	3	2	3	3	3	1	3	2	1	6
	1	9	1	2	1	2	2	6	3	1	2	1	1	1	3	2	8	2	2	2	6	2	2	8	8
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISCHER 344 RATS FEMALE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ANIMAL ID	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5
CONTROL	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
																									* TOTALS

Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Ulcer																									3
Epithelium, Hyperplasia																									5 3.0
	1	1	1	3																					3 2 11 1.7
Stomach, Glandular Erosion	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
																									1 2.0
Tongue	+																								1
Epithelium, Hyperplasia		3																							1 3.0

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cardiomyopathy																									1 2.0

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hemorrhage																									1 3.0
Hyperplasia																									9 2.8
Necrosis																									2 2.5
Vacuolization Cytoplasmic																									11 2.1
	4																								
		3																							
	4																								

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M .. Missing tissue

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

	7	5	7	7	7	7	4	7	6	7	7	7	5	7	6	7	6	7	7	7	7	7	7	7	6
	3	1	3	3	3	3	9	1	1	3	0	3	0	3	6	3	2	3	3	3	1	3	2	1	6
	1	9	1	2	1	2	2	6	3	1	2	1	1	1	3	2	8	2	2	2	6	2	2	8	8
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISCHER 344 RATS FEMALE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CONTROL	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

*** TOTALS**

Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Parathyroid Gland	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cyst	1	3																							7 3.3
Hemorrhage																									2 4.0
Hyperplasia																									10 3.0
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Ultimobranchial Cyst	1		1		2		4																		1 1.0
C-cell, Hyperplasia																									13 1.5

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia																									2 3.5
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cyst																									3 3.3

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DAY ON TEST	7	5	7	7	7	7	4	7	6	7	7	7	5	7	6	7	6	7	7	7	7	7	7	6	
	3	1	3	3	3	3	9	1	1	3	0	3	0	3	6	3	2	3	3	3	1	3	2	1	6
	1	9	1	2	1	2	2	6	3	1	2	1	1	1	3	2	8	2	2	2	6	2	2	8	8
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CONTROL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
																								* TOTALS	
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hemorrhage																								1 4.0	
Endometrium, Hyperplasia																								4 1.5	
Vagina																								2	
Epithelium, Hyperplasia, Adenomatous																								1 4.0	

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymph Node																								3
Lymph Node, Bronchial	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	7
Ectasia																								2 3.0
Inflammation																								1 2.0
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	4
Lymph Node, Mediastinal	+	M	M	+	M	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	M	M	+	30
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Hemorrhage																								2 3.0
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Capsule, Fibrosis																								1 2.0

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	1	9	1	2	1	2	2	6	3	1	2	1	1	1	3	2	8	2	2	2	6	2	2	8	8	
DAY ON TEST																										
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CONTROL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
																									* TOTALS	
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	M	+	48

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Galactocele																									3 3.0
Hyperplasia																									1 2.0

Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperkeratosis																									1 2.0

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Skeletal Muscle																									1

NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Compression		3		4		4		4		4		3		4		3		4		3		4		12 3.7	
Hemorrhage																									1 4.0
Necrosis																									1 4.0
Medulla, Meninges, Inflammation, Suppurative																									1 2.0

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	1	9	1	2	1	2	2	6	3	1	2	1	1	1	3	2	8	2	2	2	6	2	2	8	8
FISCHER 344 RATS FEMALE																									
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
	* TOTALS																								

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Foreign Body																										2 4.0
Inflammation, Suppurative	2																									3 2.0
Inflammation, Chronic																										2 1.5
Lung																										
Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Inflammation, Suppurative																										2 2.0
Inflammation, Chronic	1																									1 1.0
Alveolar Epithelium, Hyperplasia																										11 1.6
Alveolus, Infiltration Cellular, Histiocyte	1																									3 2.7
Bronchiole, Inflammation, Chronic																										16 1.1
Interstitial, Fibrosis																										1 4.0
Nose																										
Inflammation, Suppurative	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Inflammation, Chronic																										1 3.0
Glands, Respiratory Epithelium, Dilatation																										1 1.0
Goblet Cell, Hyperplasia																										4 1.0
Nasolacrimal Duct, Inflammation,																										4 2.3
Suppurative																										2
Nasolacrimal Duct, Inflammation, Chronic																										1 3.0
Olfactory Epithelium, Degeneration,																										2 1.5
Hyaline																										1 1.0
Respiratory Epithelium, Degeneration,																										1 1.0
Hyaline																										1 1.0

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	7	5	7	7	7	7	4	7	6	7	7	7	5	7	6	7	6	7	7	7	7	7	7	7	6
	3	1	3	3	3	3	9	1	1	3	0	3	0	3	6	3	2	3	3	3	1	3	2	1	6
	1	9	1	2	1	2	2	6	3	1	2	1	1	1	3	2	8	2	2	2	6	2	2	8	8
																								
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

* TOTALS

Pleura	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	15	
Inflammation, Chronic	1	2	2	2	1																				15 1.4

Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
---------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Bilateral, Lens, Cataract																									1 4.0
Bilateral, Retina, Atrophy																									1 3.0
Cornea, Inflammation, Suppurative																									1 4.0
Lens, Cataract	3																								5 2.2
Retina, Atrophy	3																								3 2.0
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Inflammation, Chronic																									1 1.0
Lacrimal Gland																									1
Zymbal's Gland																									1

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Nephropathy	2	2	2	2	2	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	2	1	2	1	38 1.4
Papilla, Mineralization																									6 1.0
Pelvis, Transitional Epithelium, Hyperplasia																									1 1.0
Pelvis, Transitional Epithelium,	3	1	2	1	1	1	2																		23 1.3

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	3	1	3	3	3	3	9	1	1	3	0	3	0	3	6	3	2	3	3	3	1	3	2	1	6
	1	9	1	2	1	2	2	6	3	1	2	1	1	1	3	2	8	2	2	2	6	2	2	8	8
<hr/>																									
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

*** TOTALS**

Mineralization																										
Pelvis, Dilatation																										1 2.0
Renal Tubule, Accumulation, Hyaline																										1 4.0
Droplet																										
Renal Tubule, Cyst																										1
Renal Tubule, Pigmentation																										1 4.0
<hr/>																										
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Transitional Epithelium, Hyperplasia																										1 2.0

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CUMENF

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Date Report Registered: 01/12/2006

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Lab: BNW

DAY ON TEST	7	6	7	7	7	7	6	5	6	7	7	5	7	7	7	7	7	6	7	5	7	7	6	7	
	3	9	3	3	3	0	8	6	7	3	3	9	3	3	3	3	3	7	3	7	1	3	6	6	3
	1	7	2	1	2	2	8	2	3	2	1	1	2	2	2	1	1	2	0	2	1	7	2	0	2
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

ALIMENTARY SYSTEM

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First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

DAY ON TEST	7	6	7	7	7	7	6	5	6	7	7	5	7	7	7	7	7	6	7	5	7	7	6	7	
	3	9	3	3	3	0	8	6	7	3	3	9	3	3	3	3	3	3	7	3	7	1	3	6	3
	1	7	2	1	2	2	8	2	3	2	1	1	2	2	2	1	1	2	0	2	1	7	2	0	2
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Fibrosis																									4
Hemorrhage																									
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic																									
Ulcer																									
Epithelium, Erosion																									
Epithelium, Hyperplasia																									
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Tongue	+																								
Epithelium, Hyperplasia		2																							
Tooth	+																								
Peridental Tissue, Inflammation		4																							

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cardiomyopathy																									
Atrium, Thrombosis																									

ENDOCRINE SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqsted: 01/12/2006

Time Report Reqsted: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

DAY ON TEST	7	6	7	7	7	7	6	5	6	7	7	5	7	7	7	7	7	7	6	7	5	7	7	6	7	
	3	9	3	3	3	0	8	6	7	3	3	9	3	3	3	3	3	3	7	3	7	1	3	6	3	
	1	7	2	1	2	2	8	2	3	2	1	1	2	2	2	1	1	2	0	2	1	7	2	0	2	
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
250 PPM	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia			2	3	3			2										3								2
Vacuolization Cytoplasmic	4	3	3			2		2			1			1												1
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Parathyroid Gland	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	
Hyperplasia																									3	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst																									4	
Hemorrhage	4		3	4		4			2	3				4					3							
Hyperplasia																										
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
C-cell, Hyperplasia	2			1			1		1					3			2	4	1							

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland
Cyst
Hyperplasia
Inflammation, Chronic

+

+

+

+

+

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+

+

3

3

3

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

	7	6	7	7	7	7	6	5	6	7	7	5	7	7	7	7	7	6	7	5	7	7	6	7	
DAY ON TEST	3	9	3	3	3	0	8	6	7	3	3	9	3	3	3	3	3	7	3	7	1	3	6	3	
	1	7	2	1	2	2	8	2	3	2	1	1	2	2	2	1	1	2	0	2	1	7	2	0	2
<hr/>																									
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
250 PPM	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females (cont...)

HEMATOPOIETIC SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 91

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

	7	6	7	7	7	7	6	5	6	7	7	5	7	7	7	7	7	7	6	7	5	7	7	6	7	
	3	9	3	3	3	3	0	8	6	7	3	3	9	3	3	3	3	3	3	7	3	7	1	3	6	3
	1	7	2	1	2	2	8	2	3	2	1	1	2	2	2	1	1	2	0	2	1	7	2	0	2	
.....																										
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
250 PPM	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	

females
(cont...)

Peripheral Nerve

Spinal Cord

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Foreign Body																									
Inflammation, Suppurative																									
Respiratory Epithelium, Hyperplasia																									
.....																									
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hemorrhage																									
Inflammation, Chronic																									
Alveolar Epithelium, Hyperplasia																									
Alveolus, Infiltration Cellular, Histiocyte	1	1																							
Bronchiole, Hyperplasia																									
Bronchiole, Inflammation, Chronic																									
.....																									
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+
Foreign Body																									
Inflammation, Suppurative																									
Inflammation, Chronic																									
Goblet Cell, Hyperplasia																									
Nasolacrimal Duct, Inflammation,																									
Suppurative																									
Olfactory Epithelium, Degeneration,																									
Hyaline																									

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

DAY ON TEST	7	6	7	7	7	7	6	5	6	7	7	5	7	7	7	7	7	6	7	5	7	7	6	7	
	3	9	3	3	3	0	8	6	7	3	3	9	3	3	3	3	3	7	3	7	1	3	6	3	
	1	7	2	1	2	2	8	2	3	2	1	1	2	2	2	1	1	2	0	2	1	7	2	0	2
<hr/>																									
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

Pelvis, Transitional Epithelium, Hyperplasia

Pelvis, Transitional Epithelium, Mineralization

1 1 1 1 1 1 1 1 1 1 1

Urinary Bladder

Transitional Epithelium, Hyperplasia

females (cont...)

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 95

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

ALIMENTARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

DAY ON TEST	7	7	6	7	7	5	7	5	0	7	7	7	7	6	5	6	7	6	6	7	7	5	7	7	7	
	3	3	3	3	3	1	3	3	1	3	0	3	3	9	4	6	1	5	2	3	3	9	3	0	3	
	1	2	5	0	1	4	1	6	6	1	4	1	2	6	7	3	6	5	8	2	2	8	1	9	2	
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
250 PPM	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
	* TOTALS																									
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	49	
Fibrosis																										1 4.0
Hemorrhage																										1 4.0
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	49	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Inflammation, Chronic																										1 2.0
Ulcer																										4 4.0
Epithelium, Erosion																										1 3.0
Epithelium, Hyperplasia																										13 2.2
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	49	
Tongue																										2
Epithelium, Hyperplasia																										2 3.0
Tooth																										2
Peridental Tissue, Inflammation																										2 3.5

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cardiomyopathy																										2 1.5
Atrium, Thrombosis																										2 3.0

ENDOCRINE SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade	M .. Missing tissue	1-4 .. Lesion qualified as:
+ .. Tissue examined microscopically	A .. Autolysis precludes evaluation	1) Minimal 3) Moderate
x .. Lesion present	BLANK .. Not examined microscopically	2) Mild 4) Marked
I .. Insufficient tissue	Page 97	

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

DAY ON TEST	7	7	6	7	7	5	7	5	0	7	7	7	7	6	5	6	7	6	6	7	7	5	7	7	7	
	3	3	3	3	3	1	3	3	1	3	0	3	3	9	4	6	1	5	2	3	3	9	3	0	3	
	1	2	5	0	1	4	1	6	6	1	4	1	2	6	7	3	6	5	8	2	2	8	1	9	2	
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
250 PPM	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
	* TOTALS																									
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	49	
Hyperplasia																										9 2.8
Vacuolization Cytoplasmic	4																									18 2.6
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	49	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	49	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	A	+	+	M	+	+	+	45	
Hyperplasia																										1 3.0
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cyst																										2 3.5
Hemorrhage																										2 4.0
Hyperplasia																										13 3.2
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	49	
C-cell, Hyperplasia																										13 1.7

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	49	
Cyst																										2 3.0
Hyperplasia																										5 3.6
Inflammation, Chronic																										1 4.0

* ... Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

	7	7	6	7	7	5	7	5	0	7	7	7	7	6	5	6	7	6	6	7	7	5	7	7	7	
	3	3	3	3	3	3	1	3	3	1	3	0	3	3	9	4	6	1	5	2	3	3	9	3	0	3
	1	2	5	0	1	4	1	6	6	1	4	1	2	6	7	3	6	5	8	2	2	8	1	9	2	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FISCHER 344 RATS FEMALE	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
ANIMAL ID	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	
250 PPM	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
																									* TOTALS	

Ovary Cyst	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	49
	4	4														4		4						7 3.9
Uterus Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	49
Endometrium, Hyperplasia																	4							1 4.0
																	2							7 2.4

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	49
Lymph Node																+								3
Lymph Node, Bronchial Hyperplasia, Lymphoid	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	A	M	M	M	M	M	M	9
																								1 3.0
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	A	+	M	M	M	M	M	1
Lymph Node, Mediastinal	M	+	+	M	+	+	+	+	+	+	+	+	+	+	+	M	+	M	+	M	M	M	M	28
Lymph Node, Mesenteric Hyperplasia, Lymphoid Infiltration Cellular, Histiocyte	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	49
																								1 2.0
																								1 4.0
Spleen Hematopoietic Cell Proliferation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
																								1 4.0

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

	7	7	6	7	7	5	7	5	0	7	7	7	7	6	5	6	7	6	6	7	7	5	7	7	7	
	3	3	3	3	3	3	1	3	3	1	3	0	3	3	9	4	6	1	5	2	3	3	9	3	0	3
	1	2	5	0	1	4	1	6	6	1	4	1	2	6	7	3	6	5	8	2	2	8	1	9	2	
.....																										
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
250 PPM	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
																									* TOTALS	

Thymus

+ + + + + + M + + + + M + + + + A + + + + + + + + + + + + 46

INTEGUMENTARY SYSTEMMammary Gland
Inflammation, Suppurative

+ 50 1 4.0

Skin
Cyst Epithelial Inclusion

+ 50 1 4.0

4

Hyperkeratosis

1 3.0

Ulcer

4 3 4.0

Sebaceous Gland, Hemorrhage

1 3.0

Subcutaneous Tissue, Inflammation,
Suppurative

1 4.0

MUSCULOSKELETAL SYSTEMBone
Hyperostosis

+ 50 1 4.0

4

NERVOUS SYSTEMBrain
Compression
Hemorrhage
Thrombosis

+ 49 9 3.6

4 4 4 4

3 3.3

1 2.0

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|
| | 7 | 7 | 6 | 7 | 7 | 5 | 7 | 5 | 0 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 6 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 1 | 3 | 0 | 3 | 3 | 9 | 4 | 6 | 1 | 5 | 2 | 3 | 3 | 9 | 3 | 0 | 3 |
| | 1 | 2 | 5 | 0 | 1 | 4 | 1 | 6 | 6 | 1 | 4 | 1 | 2 | 6 | 7 | 3 | 6 | 5 | 8 | 2 | 2 | 8 | 1 | 9 | 2 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 250 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |

Peripheral Nerve

+

1

Spinal Cord

+

1

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | 49 | |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 3 2.0 |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Inflammation, Chronic | 2 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | 10 1.5 |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Alveolus, Infiltration Cellular, Histiocyte | 1 | | | | | | | | | | | | | | | | | | | | | | | | 6 1.3 |
| Bronchiole, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 3 2.3 |
| Bronchiole, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | 48 | |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| Inflammation, Suppurative | | | | | | | | X | | | | | | | | | | | | | | | | | 3 3.3 |
| Inflammation, Chronic | | | | | | | | 3 | | | | | | | | | | | | | | | | | 3 2.0 |
| Goblet Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 6 2.3 |
| Nasolacrimal Duct, Inflammation, | | | | | | | | | | | | | | | | | | | | | | | | | 3 2.0 |
| Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Olfactory Epithelium, Degeneration, | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Hyaline | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| DAY ON TEST | 7 | 7 | 6 | 7 | 7 | 5 | 7 | 5 | 0 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 6 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|--------------|
| | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 1 | 3 | 0 | 3 | 3 | 9 | 4 | 6 | 1 | 5 | 2 | 3 | 3 | 9 | 3 | 0 | 3 | |
| | 1 | 2 | 5 | 0 | 1 | 4 | 1 | 6 | 6 | 1 | 4 | 1 | 2 | 6 | 7 | 3 | 6 | 5 | 8 | 2 | 2 | 8 | 1 | 9 | 2 | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 250 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
| Olfactory Epithelium, Hyperplasia, Basal Cell | | | | | | | | | | 1 | | | | | 1 | | | | | | | | | | 14 1.0 | |
| Olfactory Epithelium, Inflammation, Granulomatous | | | | | | | | | | | | | | | | | | | 3 | | | | | | | 1 3.0 |
| Olfactory Epithelium, Metaplasia | | | | | | | | | | | | | | | | | | | 3 | | | | | | | 1 3.0 |
| Respiratory Epithelium, Metaplasia, Squamous | | | | | | | | | | | | | | | | | | | 1 | | | | | | | 1 1.0 |
| Pleura | + | + | + | + | + | | | | | | | | | | | | | | | | | | | | | 16 |
| Inflammation, Chronic | 2 | 1 | | | | | | | | | | | | | | | | | | | | | | | | 15 |
| Mesothelium, Hyperplasia | | 1 | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | 49 | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|--------------|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | 49 | |
| Bilateral, Retina, Atrophy | | | | | | | | | | | | | | | | | | 2 | | | | | | | 1 2.0 | |
| Lens, Cataract | | | | | | | | | | | | | | | | | | | | | | | | | | 2 3.0 |
| Retina, Atrophy | | | | | | | | | | | | | | | | | | 2 | | | | | | | 5 2.2 | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | 49 | |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|---------------|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Nephropathy | 2 | 2 | 1 | 2 | 1 | | 3 | | | 1 | 1 | 2 | 2 | 1 | | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | | 37 1.5 |
| Papilla, Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | 3 1.3 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|-------|
| | 7 | 7 | 6 | 7 | 7 | 5 | 7 | 5 | 0 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 6 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | |
| | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 1 | 3 | 0 | 3 | 3 | 9 | 4 | 6 | 1 | 5 | 2 | 3 | 3 | 9 | 3 | 0 | 3 | |
| | 1 | 2 | 5 | 0 | 1 | 4 | 1 | 6 | 6 | 1 | 4 | 1 | 2 | 6 | 7 | 3 | 6 | 5 | 8 | 2 | 2 | 8 | 1 | 9 | 2 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 250 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pelvis, Transitional Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Pelvis, Transitional Epithelium,
Mineralization | 1 | | | 1 | | 1 | | | | 1 | | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | | 27 1.1 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | 49 | |
| Transitional Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |

* ... Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 5 | 6 | 7 | 6 | 7 | 6 | 5 | 7 | 7 | 6 | 7 | 7 | 7 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 7 | 1 | 0 | 3 | 3 | 1 | 3 | 3 | 6 | 1 | 3 | 3 | 3 | 2 | 3 | 1 | 3 | 4 | 3 | 3 | 3 | 8 | 3 | 3 | 3 |
| | 3 | 5 | 4 | 2 | 2 | 2 | 2 | 2 | 0 | 6 | 2 | 0 | 0 | 5 | 2 | 1 | 0 | 5 | 0 | 1 | 1 | 9 | 1 | 1 | 1 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 500 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

ALIMENTARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M., Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined mic

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

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2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| DAY ON TEST | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 5 | 6 | 7 | 6 | 7 | 6 | 5 | 7 | 7 | 6 | 7 | 7 | 7 | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 1 | 0 | 3 | 3 | 1 | 3 | 3 | 6 | 1 | 3 | 3 | 3 | 2 | 3 | 1 | 3 | 4 | 3 | 3 | 3 | 8 | 3 | 3 | 3 | 3 |
| | 3 | 5 | 4 | 2 | 2 | 2 | 2 | 2 | 0 | 6 | 2 | 0 | 0 | 5 | 2 | 1 | 0 | 5 | 0 | 1 | 1 | 9 | 1 | 1 | 1 | 1 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 500 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | + | | | | | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Erosion | | | | | | | | | | | | | | | | | | | | 3 | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | 2 | | | | | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | 4 | | | | | | |
| Epithelium, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epithelium, Hyperplasia | 2 | | | | | | | | | | | | | | | | | | | 1 | 1 | | | | | |
| Submucosa, Fibrosis | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Ulcer | | | | | | | | | | | | | | | | | | | | 4 | | | | | | |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy | | | | | | | | | | | | | | | | | | | | 2 | | | | | |
| Atrium, Thrombosis | | | | | | | | | | | | | | | | | | | | 4 | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 5 | 6 | 7 | 6 | 7 | 6 | 5 | 7 | 7 | 6 | 7 | 7 | 7 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 7 | 1 | 0 | 3 | 3 | 1 | 3 | 3 | 6 | 1 | 3 | 3 | 3 | 2 | 3 | 1 | 3 | 4 | 3 | 3 | 3 | 8 | 3 | 3 | 3 |
| | 3 | 5 | 4 | 2 | 2 | 2 | 2 | 2 | 0 | 6 | 2 | 0 | 0 | 5 | 2 | 1 | 0 | 5 | 0 | 1 | 1 | 9 | 1 | 1 | 1 |
| FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 500 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

ENDOCRINE SYSTEM

GENERAL BODY SYSTEM

Peritoneum

GENITAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 5 | 6 | 7 | 6 | 7 | 6 | 5 | 7 | 7 | 6 | 7 | 7 | 7 |
| | 7 | 1 | 0 | 3 | 3 | 1 | 3 | 3 | 6 | 1 | 3 | 3 | 3 | 2 | 3 | 1 | 3 | 4 | 3 | 3 | 3 | 8 | 3 | 3 | 3 |
| | 3 | 5 | 4 | 2 | 2 | 2 | 2 | 0 | 6 | 2 | 0 | 0 | 5 | 2 | 1 | 0 | 5 | 0 | 1 | 1 | 9 | 1 | 1 | 1 | 1 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 500 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyst, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | |
| Endometrium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreatic, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreatic, Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Bronchial | M | M | M | + | + | M | M | M | M | M | M | M | M | M | M | M | M | + | M | + | + | M | M | M | M |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | M | M | M | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mediastinal | M | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | M | + | + | M | M | + | M | M |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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x .. Lesion present

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TDMS No. 96011 - 05

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Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

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CUMENE

CAS Number: 98-82-8

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Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 5 | 6 | 7 | 6 | 7 | 6 | 5 | 7 | 7 | 6 | 7 | 7 | 7 |
| | 7 | 1 | 0 | 3 | 3 | 1 | 3 | 3 | 6 | 1 | 3 | 3 | 3 | 2 | 3 | 1 | 3 | 4 | 3 | 3 | 3 | 8 | 3 | 3 | 3 |
| | 3 | 5 | 4 | 2 | 2 | 2 | 2 | 2 | 0 | 6 | 2 | 0 | 0 | 5 | 2 | 1 | 0 | 5 | 0 | 1 | 1 | 9 | 1 | 1 | 1 |
| DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 500 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

Angiectasis
Hemorrhage
Hyperplasia, Histiocytic
Hyperplasia, Lymphoid

4

3

4

Lymph Node, Mesenteric
Ectasia

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Spleen
Fibrosis
Hematopoietic Cell Proliferation

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Thymus
Hyperplasia, Tubular

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INTEGUMENTARY SYSTEM

Mammary Gland
Epithelium, Hyperplasia

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MUSCULOSKELETAL SYSTEM

Bone
Maxilla, Fracture

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4

* ... Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

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TDMS No. 96011 - 05

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Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 5 | 6 | 7 | 6 | 7 | 6 | 5 | 7 | 7 | 6 | 7 | 7 | 7 |
| | 7 | 1 | 0 | 3 | 3 | 1 | 3 | 3 | 6 | 1 | 3 | 3 | 3 | 2 | 3 | 1 | 3 | 4 | 3 | 3 | 3 | 8 | 3 | 3 | 3 |
| | 3 | 5 | 4 | 2 | 2 | 2 | 2 | 2 | 0 | 6 | 2 | 0 | 0 | 5 | 2 | 1 | 0 | 5 | 0 | 1 | 1 | 9 | 1 | 1 | 1 |
| DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 500 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

Skeletal Muscle

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Compression | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | |
| Peripheral Nerve | | | | | | | | | | | | | | | | | | | + | | | | | | |
| Spinal Cord | | | | | | | | | | | | | | | | | | | + | | | | | | |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Foreign Body | | | | | | | | | | | | | | | | | | | 4 | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | 2 | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hemorrhage | | | | | | | | | | | | | | | | | | | 1 | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | 3 | | | | | | |
| Thrombosis | | | | | | | | | | | | | | | | | | | 2 | | | | | | |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | 1 | | | | | | |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | 2 | | | | | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

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|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 5 | 6 | 7 | 6 | 7 | 6 | 5 | 7 | 7 | 6 | 7 | 7 | 7 |
| | 7 | 1 | 0 | 3 | 3 | 1 | 3 | 3 | 6 | 1 | 3 | 3 | 3 | 2 | 3 | 1 | 3 | 4 | 3 | 3 | 3 | 8 | 3 | 3 | 3 |
| | 3 | 5 | 4 | 2 | 2 | 2 | 2 | 2 | 0 | 6 | 2 | 0 | 0 | 5 | 2 | 1 | 0 | 5 | 0 | 1 | 1 | 9 | 1 | 1 | 1 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 500 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Foreign Body | X | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | |
| Goblet Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nasolacrimal Duct, Inflammation,
Suppurative | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Olfactory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |
| Olfactory Epithelium, Hyperplasia, Basal
Cell | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | 1 | | 1 | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 |
| Olfactory Epithelium, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory Epithelium, Degeneration,
Hyaline | | | | | | | 1 | | | | | | | | | | | | | | | | | | |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |
| Turbinate, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pleura | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Glands, Cyst | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Bilateral, Retina, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lens, Cataract | | | | | | | | | | | | | | | | | | | | | | | | | |
| Retina, Atrophy | 2 | | | | | | | | | | | | | | | | | | | | | | | | 2 |

* ... Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

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First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 5 | 6 | 7 | 6 | 7 | 6 | 5 | 7 | 7 | 6 | 7 | 7 | 7 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 7 | 1 | 0 | 3 | 3 | 1 | 3 | 3 | 6 | 1 | 3 | 3 | 3 | 2 | 3 | 1 | 3 | 4 | 3 | 3 | 3 | 8 | 3 | 3 | 3 |
| | 3 | 5 | 4 | 2 | 2 | 2 | 2 | 2 | 0 | 6 | 2 | 0 | 0 | 5 | 2 | 1 | 0 | 5 | 0 | 1 | 1 | 9 | 1 | 1 | 1 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 500 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

Harderian Gland
Inflammation, Chronic

Zymbal's Gland

+

URINARY SYSTEM

Kidney
Infarct, Multiple
Nephropathy
Papilla, Mineralization
Pelvis, Transitional Epithelium, Hyperplasia
Pelvis, Transitional Epithelium,
Mineralization
Renal Tubule, Accumulation, Hyaline
Droplet
Renal Tubule, Cyst

Urinary Bladder
Transitional Epithelium, Hyperplasia

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M., Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as

1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| DAY ON TEST | 6 | 7 | 7 | 7 | 6 | 3 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | 3 | 3 | 3 | 7 | 3 | 3 | 7 | 6 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 4 | 0 | 1 | 2 | 6 | 9 | 2 | 9 | 1 | 1 | 1 | 1 | 2 | 1 | 8 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 2 |

.....

| FISCHER 344 RATS FEMALE | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 500 PPM | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

ALIMENTARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK - Not examined microscopically

1-4 .. Lesion qualified as:

1-4: Lesion qualified as:

1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 96011 - 05

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Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

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CUMENE

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Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| DAY ON TEST | 6 | 7 | 7 | 7 | 6 | 3 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|--------|--------|
| | 2 | 3 | 3 | 3 | 7 | 3 | 3 | 7 | 6 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 4 | 0 | 1 | 2 | 6 | 9 | 2 | 9 | 1 | 1 | 1 | 1 | 2 | 1 | 8 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 500 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS | | |
| Necrosis | | 2 | | | | | | | | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | 17 2.9 | |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Erosion | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 2.3 |
| Epithelium, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | 12 1.9 |
| Submucosa, Fibrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|-------|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Cardiomyopathy | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |
| Atrium, Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 4.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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2) Mild 4) Marked

TDMS No. 96011 - 05

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Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

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Time Report Reqstd: 09:48:09

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| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|-----------------|---|---|
| | 6 | 7 | 7 | 7 | 6 | 3 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 2 | 3 | 3 | 3 | 7 | 3 | 3 | 7 | 6 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 4 | 0 | 1 | 2 | 6 | 9 | 2 | 9 | 1 | 1 | 1 | 1 | 2 | 1 | 8 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 500 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | * TOTALS | | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|--------|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 13 2.8 |
| Vacuolization Cytoplasmic | 1 | 1 | | | | 2 | | 2 | 4 | | 2 | 4 | | | | | | | | | | | | | | | | | 16 2.4 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | 48 | | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 3.5 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 2.7 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| C-cell, Hyperplasia | 1 | 1 | | | 3 | | | | | | 3 | | 3 | | 2 | | | | | | | | | | | | | | 15 1.8 |
| Follicular Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |

GENERAL BODY SYSTEM

| | | | |
|------------|---|--|---|
| Peritoneum | + | | 1 |
|------------|---|--|---|

GENITAL SYSTEM

* ... Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|----------|---|---|
| | 6 | 7 | 7 | 7 | 6 | 3 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 2 | 3 | 3 | 3 | 7 | 3 | 3 | 7 | 6 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 4 | 0 | 1 | 2 | 6 | 9 | 2 | 9 | 1 | 1 | 1 | 1 | 2 | 1 | 8 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| 500 PPM | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | * TOTALS | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 3.5 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | 7 3.3 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | 7 3.3 |
| Cyst, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 3.8 |
| Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Endometrium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|---------|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Lymph Node | + | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 1.4.0 |
| Pancreatic, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Pancreatic, Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Bronchial | M | M | M | + | M | M | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 8 | | |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 1 | | |
| Lymph Node, Mediastinal | + | M | M | M | + | + | M | M | + | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 26 | | |

* ... Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

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| DAY ON TEST | 6 | 7 | 7 | 7 | 6 | 3 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|-------|---|
| | 2 | 3 | 3 | 3 | 7 | 3 | 3 | 7 | 6 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 4 | 0 | 1 | 2 | 6 | 9 | 2 | 9 | 1 | 1 | 1 | 1 | 2 | 1 | 8 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 500 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS | | |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Hyperplasia, Histiocytic | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| Lymph Node, Mesenteric Ectasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 1 4.0 | | |
| Fibrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 3.3 | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 4.0 | |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Hyperplasia, Tubular | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|---|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 1 4.0 | |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|--|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 1 4.0 | |
| Maxilla, Fracture | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ... Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|---|---|
| | 6 | 7 | 7 | 7 | 6 | 3 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| DAY ON TEST | 2 | 3 | 3 | 3 | 7 | 3 | 3 | 7 | 6 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 4 | 0 | 1 | 2 | 6 | 9 | 2 | 9 | 1 | 1 | 1 | 1 | 2 | 1 | 8 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 500 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * | TOTALS | | |

Skeletal Muscle

+

1

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|-------|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Compression | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 4.0 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 3.5 |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Peripheral Nerve | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Spinal Cord | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|---------|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 4.0 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 1.5 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.5 |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | | 8 1.8 |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Alveolar Epithelium, Hyperplasia | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 5 2.4 |
| Alveolus, Infiltration Cellular, Histiocyte | 3 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | 11 1.6 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

SPECIAL SENSES SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

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Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

Harderian Gland
Inflammation, Chronic

Zymbal's Gland

1

URINARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M., Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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TDMS No. 96011 - 05

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CUMENF

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Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| DAY ON TEST | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 2 | 7 | 7 | 7 | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 8 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 7 | 3 | 2 | 3 | 6 | 3 | 3 | 3 | |
| | 1 | 2 | 2 | 8 | 1 | 2 | 1 | 3 | 0 | 7 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 4 | 1 | 8 | 0 | 7 | 1 | 2 | 1 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

ALIMENTARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
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TDMS No. 96011 - 05

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Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| DAY ON TEST | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 2 | 7 | 7 | 7 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 3 | 3 | 1 | 3 | 3 | 8 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 7 | 2 | 3 | 6 | 3 | 3 |
| | 1 | 2 | 2 | 8 | 1 | 2 | 1 | 3 | 0 | 7 | 1 | 1 | 1 | 2 | 2 | 1 | 4 | 8 | 0 | 7 | 1 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |
| | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | |
| Artery, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Tongue | + | | | | | | | | | | | | | | | | | | | | |
| Epithelium, Hyperplasia | | 3 | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | | | | | | | | | | | | | | | | | | | | | |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

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TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

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Date Report Reqstd: 01/12/2006

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First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 2 | 7 | 7 | 7 |
| | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 8 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 7 | 3 | 2 | 3 | 6 | 3 |
| | 1 | 2 | 2 | 8 | 1 | 2 | 1 | 3 | 0 | 7 | 1 | 1 | 1 | 2 | 2 | 1 | 4 | 1 | 8 | 0 | 7 |
| FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |

females
(cont...)

Atrium, Thrombosis

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | 2 | | 2 | | | 1 | | | | 1 | | | | 2 | | 1 | | | | | 2 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | |
| Vacuolization Cytoplasmic | | | | | | | 4 | | | | | | 3 | | | | 2 | | | | 3 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | M | + | + |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | 2 | | 3 | 3 | 3 | | | | 3 | 4 | | | | 2 | | 2 | | | | 3 | 2 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| C-cell, Hyperplasia | 4 | 4 | | | | 1 | | | 4 | 3 | 2 | 1 | | | | | | | | | 1 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

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TDMS No. 96011 - 05

Test Type: CHRONIC

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Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| DAY ON TEST | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 2 | 7 | 7 | 7 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 3 | 3 | 1 | 3 | 3 | 8 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 7 | 2 | 3 | 6 | 3 | 3 |
| | 1 | 2 | 2 | 8 | 1 | 2 | 1 | 3 | 0 | 7 | 1 | 1 | 1 | 2 | 2 | 1 | 4 | 1 | 8 | 0 | 7 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |

females
(cont...)

| | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | 2 | 2 | | | | | 2 | | | | | | | | | | 3 | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | |
| Endometrium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node | | | | | | | | | | | | | | | | | + | | | | |
| Lymph Node, Bronchial | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M |
| Ectasia | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mediastinal | M | + | + | M | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | + |
| Hemorrhage | | | | | | | | | | | | | | | | | 4 | | | | |
| | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 2 | 7 | 7 | 7 |
| | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 8 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 7 | 3 | 2 | 3 | 6 | 3 |
| | 1 | 2 | 2 | 8 | 1 | 2 | 1 | 3 | 0 | 7 | 1 | 1 | 1 | 2 | 2 | 1 | 4 | 1 | 8 | 0 | 7 |
| FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |

females
(cont...)

Maxilla, Inflammation, Chronic Active

Skeletal Muscle

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Compression | | | | | | | | | | | | | | | | | 3 | | | | 4 |
| Demyelination | | | | | | | | | | | | | | | | | | | | | |
| Gliosis | | | | | | | | | | | | | | | | | | | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | 4 | | | |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | |
| Medulla, Neuron, Necrosis | | | | | | | | | | | | | | | | | | | | | |
| Neuron, Degeneration | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Spinal Cord | | | | | | | | | | | | | | | | | | | | | |
| Gliosis | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | 1 | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst, Squamous | | | | | | | | | | | | | | | | | X | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqsted: 01/12/2006

Time Report Reqsted: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| DAY ON TEST | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 2 | 7 | 7 | 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 8 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 7 | 2 | 3 | 6 | 3 | 3 |
| | 1 | 2 | 2 | 8 | 1 | 2 | 1 | 3 | 0 | 7 | 1 | 1 | 1 | 2 | 2 | 1 | 4 | 1 | 8 | 0 | 7 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |
| | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | |
| Alveolar Epithelium, Hyperplasia | 2 | | | | | | | | | | | | | | | | | | | | |
| Alveolar Epithelium, Metaplasia, | | | | | | | | | | | | | | | | | | | | | |
| Squamous | | | | | | | | | | | | | | | | | | | | | |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | |
| Alveolus, Proteinosis | 1 | 2 | 1 | | | | | | | | | | | | | | | | | | |
| Bronchiole, Hyperplasia | | | | | | | | | | | | | | | | | | | | | |
| Bronchiole, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia, Basal Cell | X | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | |
| Goblet Cell, Hyperplasia | 2 | | | | | | | | | | | | | | | | | | | | |
| Nasolacrimal Duct, Inflammation, | | | | | | | | | | | | | | | | | | | | | |
| Suppurative | | | | | | | | | | | | | | | | | | | | | |
| Olfactory Epithelium, Hyperplasia, Basal | | | | | | | | | | | | | | | | | | | | | |
| Cell | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | |
| Olfactory Epithelium, Metaplasia | | | | | | | | | | | | | | | | | | | | | |
| Respiratory Epithelium, Hyperplasia | 2 | | | | | | | | | | | | | | | | | | | | |
| Pleura | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Inflammation, Chronic | 1 | 1 | 2 | | | | | | | | | | | | | | | | | | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

SPECIAL SENSES SYSTEM

* ... Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

ALIMENTARY SYSTEM

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Lab: BNW

| FISCHER 344 RATS FEMALE
1000 PPM | ANIMAL ID | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|-------------------------------------|-----------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---------|
| | | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 4 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 4 | 6 | 6 | 7 | |
| | | 3 | 3 | 1 | 3 | 4 | 3 | 9 | 3 | 3 | 8 | 0 | 9 | 1 | 3 | 3 | 5 | 9 | 3 | 3 | 3 | 3 | 0 | 2 | 3 | 3 | |
| | | 2 | 1 | 9 | 1 | 2 | 1 | 5 | 1 | 1 | 8 | 4 | 6 | 1 | 1 | 1 | 9 | 6 | 0 | 1 | 1 | 1 | 0 | 5 | 8 | 0 | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | | 9 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | 8 3.0 |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Artery, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Salivary Glands | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Forestomach | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 8 1.4 |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Tongue | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 3 | |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 3 3.0 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| Blood Vessel | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 4 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 4 | 6 | 6 | 7 |
| | 3 | 3 | 1 | 3 | 4 | 3 | 9 | 3 | 3 | 8 | 0 | 9 | 1 | 3 | 3 | 5 | 9 | 3 | 3 | 3 | 3 | 0 | 2 | 3 | 3 |
| | 2 | 1 | 9 | 1 | 2 | 1 | 5 | 1 | 1 | 8 | 4 | 6 | 1 | 1 | 1 | 9 | 6 | 0 | 1 | 1 | 1 | 0 | 5 | 8 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*** TOTALS**

Atrium, Thrombosis

4

1 4.0

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | 2 | 1 | | | | | | | | | | | | | | | | | | | | | | | 12 2.0 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | | | | 7 2.7 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pituitary Gland | + | + | + | + | + | + | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 2 4.0 |
| Hyperplasia | 3 | | 4 | | | | | | | | | | | | | | | | | | | | | | 16 2.8 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| C-cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 15 2.2 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

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TDMS No. 96011 - 05

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CAS Number: 98-82-8

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Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

HEMATOPOIETIC SYSTEM

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+ .. Tissue examined microscopically

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I .. Insufficient tissue

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Lab: BNW

| DAY ON TEST | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 7 | 6 | 4 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 4 | 6 | 6 | 7 | | |
|----------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| | 3 | 3 | 1 | 3 | 4 | 3 | 9 | 3 | 3 | 8 | 0 | 9 | 1 | 3 | 3 | 5 | 9 | 3 | 3 | 3 | 0 | 2 | 3 | 3 | |
| | 2 | 1 | 9 | 1 | 2 | 1 | 5 | 1 | 1 | 8 | 4 | 6 | 1 | 1 | 1 | 9 | 6 | 0 | 1 | 1 | 1 | 0 | 5 | 8 | 0 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | 2 3.5 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | 2 4.0 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 2 4.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Galactocele | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperkeratosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Ulcer | 3 | | | | | | | | | | | | | | | | | | | | | | | | 2 3.5 |
| Subcutaneous Tissue, Fibrosis | 3 | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

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Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 4 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 4 | 6 | 6 | 7 |
| | 3 | 3 | 1 | 3 | 4 | 3 | 9 | 3 | 3 | 8 | 0 | 9 | 1 | 3 | 3 | 5 | 9 | 3 | 3 | 3 | 3 | 0 | 2 | 3 | 3 |
| | 2 | 1 | 9 | 1 | 2 | 1 | 5 | 1 | 1 | 8 | 4 | 6 | 1 | 1 | 1 | 9 | 6 | 0 | 1 | 1 | 1 | 0 | 5 | 8 | 0 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

* TOTALS

| | | |
|---------------------------------------|---|-------|
| Maxilla, Inflammation, Chronic Active | 3 | 1 3.0 |
|---------------------------------------|---|-------|

| | | |
|-----------------|---|---|
| Skeletal Muscle | + | 1 |
|-----------------|---|---|

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Compression | | | | | 4 | | | | 3 | | | | | | | | | | | | | | | | 5 3.6 |
| Demyelination | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Gliosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Hemorrhage | | | | | | | | | | | | | | | | | | 4 | | | | | | | 3 3.0 |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Medulla, Neuron, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Neuron, Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Spinal Cord | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Gliosis | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | 3 |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---------|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.1.5 |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.1.0 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cyst, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| DAY ON TEST | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 4 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 4 | 6 | 6 | 7 | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|-----------------|
| | 3 | 3 | 1 | 3 | 4 | 3 | 9 | 3 | 3 | 8 | 0 | 9 | 1 | 3 | 3 | 5 | 9 | 3 | 3 | 3 | 3 | 0 | 2 | 3 | 3 |
| | 2 | 1 | 9 | 1 | 2 | 1 | 5 | 1 | 1 | 8 | 4 | 6 | 1 | 1 | 1 | 9 | 6 | 0 | 1 | 1 | 1 | 0 | 5 | 8 | 0 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
| Inflammation, Chronic | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | 3 | 16 1.9 |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 2 | 7 2.1 |
| Alveolar Epithelium, Metaplasia,
Squamous | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Alveolus, Infiltration Cellular, Histiocyte | 2 | 2 | | | 1 | 1 | | | | | | | | | | | | | | | | | | 1 | 14 1.6 |
| Alveolus, Proteinosis | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 |
| Bronchiole, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Bronchiole, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | 3 2.0 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Foreign Body | X | | | | | | X | | | | | | | | | | | | | | | | | | 3 |
| Hyperplasia, Basal Cell | | | | | | | 1 | | | | | | | | | | | | | | | | | | 1 1.0 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.5 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Goblet Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 5 2.0 |
| Nasolacrimal Duct, Inflammation,
Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Olfactory Epithelium, Hyperplasia, Basal
Cell | 1 | | | | 1 | 2 | | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 31 1.1 |
| Olfactory Epithelium, Metaplasia | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 6 2.3 |
| Pleura | + | | | | | | | | | | | | | | | | | | | | | | | | + 20 |
| Inflammation, Chronic | 2 | | | | | | | | | | | | | | | | | | | | | | | | 3 20 1.8 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

SPECIAL SENSES SYSTEM

* ... Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 96011 - 05

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 4 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 4 | 6 | 6 | 7 | |
| | 3 | 3 | 1 | 3 | 4 | 3 | 9 | 3 | 3 | 8 | 0 | 9 | 1 | 3 | 3 | 5 | 9 | 3 | 3 | 3 | 3 | 0 | 2 | 3 | 3 |
| | 2 | 1 | 9 | 1 | 2 | 1 | 5 | 1 | 1 | 8 | 4 | 6 | 1 | 1 | 1 | 9 | 6 | 0 | 1 | 1 | 1 | 0 | 5 | 8 | 0 |
| FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*** TOTALS**

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cornea, Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Cornea, Inflammation | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Lens, Cataract | | | | | | | | | | | | | | | | | | | | | | | | 3 2.0 |
| Retina, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Zymbal's Gland | | | | | | | | | | | | | | | | | | | | | | | | 1 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Nephropathy | 3 | 2 | 3 | 2 | 1 | 3 | + | 2 | 2 | 3 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 44 1.9 |
| Artery, Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Papilla, Mineralization | 1 | | 1 | | | | | | | | | | | | | | | | | | | | | 6 1.0 |
| Pelvis, Transitional Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Pelvis, Transitional Epithelium, Mineralization | | | | | | | | | | | | | | | | | | | | | | | | 22 1.3 |
| Renal Tubule, Cyst | | | | | | | | | | | | | | | X | | | | | | | | | 1 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Transitional Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |

*** END OF REPORT ***

* ... Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked